UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Region
7600 Sand Point Way N.E., Bldg. 1
Seattle, WA 98115

NMFS Tracking No.:
2002/00239

July 16, 2003

Ruth Monahan
Sawtooth National Forest
2647 Kimberly Road East
Twin Falls, Idaho 83301

Re: Endangered Species Act Section 7 Formal Consultation and Magnuson-Stevens Fishery Conservation and Management Act Essential Fish Habitat Consultation for Outfitter/Guided Commercial & Non-Outfitted Floatboating and Walk/Wade Special Use Permit Renewals (2 projects)

Dear Ms. Monahan:

Enclosed is a biological opinion (Opinion) prepared by NOAA's National Marine Fisheries Service (NOAA Fisheries) pursuant to section 7 of the Endangered Species Act (ESA) on the effects of the proposed Outfitter/Guided Commercial & Non-Outfitted Floatboating and Walk/Wade Special Use Permit Renewals, Upper Salmon River, HUC # 17060201 encompassing the Action Area of the Upper Salmon River, Custer County, Idaho. In this Opinion, NOAA Fisheries concludes that the proposed action is not likely to jeopardize the continued existence of ESA-listed species or adversely modify designated critical habitat. As required by section 7 of the ESA, NOAA Fisheries includes reasonable and prudent measures with nondiscretionary terms and conditions that NOAA Fisheries believes are necessary to minimize the incidental take associated with this action.

The enclosure also documents a consultation on essential fish habitat (EFH) pursuant to section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act and its implementing regulations (50 CFR Part 600). NOAA Fisheries concludes that the proposed action will not adversely affect designated EFH for Snake River steelhead or Snake River chinook salmon.

If you have any questions regarding this letter, please contact Mr. Ken Troyer (208) 378-5692 or Mr. David Fornander (208) 685-6902 of my staff in the Idaho Habitat Branch.

Sincerely,

for D. Robert Lohn
Regional Administrator

Enclosure

cc: J. Foss - USFWS
D. Cooper - USFS
D. Parrish - IDFG
K. Kutchins - SBT
J. Pinkham - NPT

Endangered Species Act - Section 7 Consultation
Biological Opinion
and
Magnuson-Stevens Fishery Management and Conservation Act
Essential Fish Habitat Consultation

Outfitted/Guided Commercial & Non-Outfitted Floatboating
and
Walk/Wade Angling
Special Use Permit Renewals

Action Agency:	United States Department of Agriculture, Forest Service, Sawtooth National Forest
Consultation Conducted By:	NOAA's National Marine Fisheries Service, (NOAA Fisheries), Northwest Region (NWR)
Date Issued:	July 16, 2003

Issued by: _____

D. Robert Lohn
Regional Administrator

REFER to: #F/NWR/2002/00239

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I. INTRODUCTION

The Endangered Species Act (ESA) of 1973 (16 USC 1531-1544), as amended, establishes a national program for conserving threatened and endangered species of fish, wildlife, plants, and the habitat on which they depend. Section 7(a)(2) of the ESA requires Federal agencies to consult with U.S. Fish and Wildlife Service and NOAA's National Marine Fisheries Service (NOAA Fisheries), as appropriate, to ensure that their actions are not likely to jeopardize the continued existence of endangered or threatened species or adversely modify or destroy their designated critical habitats. This biological opinion (Opinion) is the product of an interagency consultation pursuant to section 7(a)(2) of the ESA and implementing regulations found at
50 CFR 402.

The analysis also fulfills the essential fish habitat (EFH) requirements under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). The MSA, as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-267), established procedures designed to identify, conserve, and enhance EFH for those species regulated under a Federal fisheries management plan. Federal agencies must consult with NOAA Fisheries on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH (§305(b)(2)).

The Sawtooth National Forest (SNF) proposes to reissue special use permits (SUP). The purpose of the reissuance of these SUPs is to allow outfitted/guided floatboating and angling on the upper main Salmon River. The SNF is proposing the action according to its authority under Multiple-Use Sustained-Yield Act of June 12, 1960. The administrative record for this consultation is on file at the Idaho Habitat Branch office, located in Boise, Idaho.

A. Background and Consultation History

The Department of Commerce, NOAA Fisheries in 1992 completed its initial ESA section 7 consultation on the effects of commercial floatboating activities on ESA listed salmon within the upper Salmon River of the SNF, Sawtooth National Recreation Area (SNRA). The resultant Opinion, dated September 25, 1992, covered the 1992-1993 floatboat seasons. The action was modified in 1994. NOAA Fisheries concurred (June 6, 1995) with a may affect, not likely to adversely affect (NLAA) determination for floatboating that would occur prior to the chinook salmon spawning period. NOAA Fisheries issued an Opinion July 18, 1995, for floatboating that occurs during and after the chinook salmon spawning period. Changes to the action allowed NOAA Fisheries to concur June 21, 1996, with an NLAA finding for the issuance of floatboat permits. That consultation expired after the 2000 floatboating season. On March 26, 2001, NOAA Fisheries issued an extension of consultation to address the 2001 floatboating season.

The SNF at an SNF Level 1 team meeting September 28, 2001, in Stanley, Idaho, proposed to reissue outfitter/guide permits for floatboating, and to issue commercial guided walk/wade

angling SUP on the upper main Salmon River. The SNF supplied NOAA Fisheries with a list of proposed alternatives for the actions. NOAA Fisheries reviewed alternatives and responded with recommendations via electronic mail on October 2, 2001.

Floatboating and walk/wade SUP as addressed in the draft "Updates to the Upper Canyon and Sawtooth Valley All Aquatics Biological Assessment (BA)" were discussed at the February 27, 2002, SNF Level 1 team meeting. After reviewing the SNF document received April 1, 2002, the "Upper and Lower Canyon Subpopulations, and the Sawtooth Valley BA", NOAA Fisheries concluded April 10, 2002, the BA lacked sufficient information needed to complete consultation. NOAA Fisheries and the SNRA agreed upon additions to the proposed actions at a meeting in Fairfield, May 3, 2002. Supplemental portions updating the BA were received by NOAA Fisheries May 8, 2002, and a letter was sent on May 10, 2002, to the SNF acknowledging the completeness of the BA and the initiation of formal consultation with NOAA Fisheries. NOAA Fisheries prepared a draft of this Opinion, and sent it to SNF on July 10, 2002. Upon receiving the draft Opinion the SNF requested a meeting to discuss specific concerns about NOAA Fisheries' interpretation of the proposed actions and about draft terms and conditions in the Opinion. Points of discussion were addressed through a series of meetings and phone discussions during the fall of 2002, and concluded with a telephone conference call on February 21, 2003.

Due to the extended duration of these consultation activities, NOAA Fisheries responded September 23, 2002, to an SNF letter, dated August 5, 2002, concurring with the extension of temporary Floatboating and Angling Outfitter/Guide SUPs through the end of the 2002 operating season.

NOAA Fisheries and SNF met with the applicants on January 30, 2003 to discuss and receive comments on a draft of this Opinion. Upon receipt of written comments and concerns from outfitters in mid-February of 2003, NOAA Fisheries and SNF personnel evaluated opportunities to address concerns of the applicants. Measures to better meet the needs of the applicants and provide necessary protection for listed salmon were developed and integrated into the Opinion (See ATTACHMENT A).

On May 8, 2003 representatives from U.S. Senator Crapo's office, NOAA Fisheries and the SNF met to discuss further concerns addressed by one of the applicants. Alternatives were developed and presented to the applicant by SNF staff.

The objective of this Opinion is to determine whether the proposed actions (reissuance of commercial floatboating SUPs, access management of non-commercial floatboating, and issuance of commercial walk/wade angling SUPs are likely to jeopardize the continued existence of Snake River sockeye salmon (*Oncorhynchus nerka*), Snake River spring/summer chinook salmon *(Oncorhynchus tshawytscha),* or Snake River steelhead (*Oncorhynchus mykiss*); result in the destruction or adverse modification of designated critical habitat; or adversely affect EFH for chinook salmon.

II. PROPOSED ACTIONS

A. Floatboat Outfitter and Guide Permit

The SNF proposes to reissue the outfitter/guide permits for floatboating on the upper main Salmon River. This action would authorize SUPs to commercial floatboat outfitters for a total of up to 11,203 annual priority use days (APUD) as described in the May 1, 1996, Record of Decision, Salmon River Corridor, Final Environmental Impact Statement (FEIS). The APUD represents the maximum number of commercial users who may annually access the river during the permitted season, May 1 to October 31. Use above these figures may only be issued as temporary use days on a case-by-case basis by the SNF line officer.

Commercial floatboating would be permitted on approximately 29 miles of the upper Salmon River, from the Buckhorn Bridge Picnic Area (Mile Post [MP] 184.4) downstream to Torrey's Hole Landing (MP 210.6). The hydrologic unit code for the action area is 17060201. Outfitters offer day use services within the permitted season running from May 1 to October 31, with the majority of use occurring in June, July, and August. Up to six permits could be issued for guided activities on the river. Each outfitter would be authorized to offer guided raft, kayak, and canoe trips. River access is at put-ins and take-outs designated in the Salmon River Corridor FEIS. These put-in and take-out sites include the following areas and their associated Highway 75 MP readings: Buckhorn Picnic Area (MP 184.4), Salmon River Bridge/Stanley (MP 189.9), Four Aces (MP 191.7), Mormon Bend (MP 196.0), Yankee Fork (MP 202.6), Elk Creek (MP 203.2),
The Narrows (kayaks only) (MP 206.6), the River Company lunch site (MP 208.5, MP 208.7 [when constructed]), and Torrey's Hole/Torrey's Hole Landing (MP 210.6).

The SNF BA described the action in terms of three sections of the river floatboat outfitters use. These sections were designated NSBC, CAHR and PEHO, with the acronyms derived from some of the prominent stream names in these sections. The NSBC is the upper section and is approximately 8 miles long, with the town of Stanley, Idaho, (MP 189.9) and the Sawtooth Fish Hatchery in this section. The CAHR is the middle section of approximately 16 miles; and PEHO is the lower or most downstream section and is approximately 5 miles in length. Within this area, outfitted and non-outfitted floatboaters could float all segments of the river (the entire 29-mile stretch) until August 15, and downstream from Stanley (approximately 23 miles) until August 31. Those August closure dates were determined as being "within the range of the spawning surge, based on the data set (personal communication, Mark Moulton, hydrologist, Sawtooth National Forest, September 16, 2002)."

The "spawning surge" is essentially the onset of steady spawning activity. The SNF determined the average timing of the onset in spawning activity by identifying the first notable upward trend on a bell curve (graph of numbers of new redds, by day), based on temporal spawning data

collected over the last 10 years. The onset of spawning is, therefore, the time during which a steady development of redds first became apparent. The few very earliest redds were typically present prior to this time.

Between the specific closure dates (designed to curtail use after the average dates of spawning onset) and September 22, the Salmon River would be closed to all outfitted floating, with the additional closure of access through SNF lands to non-outfitted floatboaters, between the Buckhorn Launch and the SNF eastern boundary, including 8 miles of NSBC, 16 miles of CAHR and 10 miles of PEHO, a total of 34 miles. From September 23 to November 1, river access would be reopened to outfitted and non-outfitted floating. Violations of closures would result in U.S. Forest Service (USFS) law enforcement or permit action.

The USFS will conduct a minimum of two chinook salmon spawning surveys within each of the NSBC, CAHR and PEHO sections: one survey just prior to August 31, and one just prior to September 22. Observations and data from these surveys will be combined with annual Idaho Department of Fish and Game (IDFG) aerial surveys conducted during the first week of September to evaluate the appropriateness of the prescribed closure dates. Individual redds identified during these surveys will not be marked or signed in any way.

B. Non-Outfitted Floating

The same stretch of the upper main Salmon River described for the outfitted floating above will also be open to non-outfitted floating from Buckhorn Bridge to Whiskey Flats (MP 213.5). Non-outfitted floatboaters use the same sections as the guided floatboaters (8 miles within NSBC, 16 miles within CAHR), and also occasionally float all or some of the 5 mile segment of the PEHO section, downstream of Torrey's Hole Landing to the eastern SNRA boundary (34 miles total). Non-outfitted floatboating river access points are designated at the same locations as those described for outfitters above. The SNF administers access through the use of free self-issue permits, and information regarding current floating conditions and restrictions available at these sites. River segment use by non-outfitted floatboaters also varies by season and user. For example, kayakers tend to use the mid-segments of the river early, while families and other non-outfitted floatboaters are the primary users of the river above the Yankee Fork after August 1. The number of non-outfitted boats floating the upper main Salmon River varies greatly between years. The SNF tracks non-outfitted use through the self-issue permit system. Over the past 4 years, the highest use rate was in 2000 with 1204 registered boats and the lowest in 2001 with 357 registered boats (SNF Floatboat Monitoring Report 2001).

The river access closures, as described in Outfitted Floating above, would also apply to non-outfitted floating. Within the action area, outfitted and non-outfitted floatboaters could float all segments of the river (the entire 34-mile stretch) until August 15, and downstream from Stanley (approximately 23 miles) until August 31. The SNF administered access points along the river would be closed on those dates, and the closure would extend through September 22.

Non-outfitted floaters would be governed by the self-issued permit system and river access closures. The SNF has jurisdiction over access to the river from lands administered by the SNF. Violations of access closures would result in USFS law enforcement action.

C. Outfitted Walk/Wade Angling

The SNRA proposes to reissue the outfitter permits for walk/wade guided angling services on the upper main Salmon River. This action would include issuing four SUPs to four outfitters to guide clients between the eastern boundary of the SNRA (at the confluence of Thompson Creek and the Salmon River) to approximately 100 yards below the Sawtooth Fish Hatchery. Four outfitters would be authorized to guide during the steelhead season, March 1 to April 30. One of these permits would also include the resident trout season from June 1 to November 30. The action would only authorize the "guiding" of clients - the action of legally hooking, landing, or harvesting fish is subject to the laws and regulations of the sport fishery of the State of Idaho, as administered by IDFG (and permitted under ESA section 10). A total of 300 priority use service days would be authorized. Any use above these figures may only be issued as temporary use days on a case-by-case basis by the SNF line officer. The river closures, as described in Outfitted Floating section above, would also apply to the walk/wade angling permit. Violations of closures would result in law enforcement and/or permit action.

D. Proposed Actions Modifications and/or Additions

The measures listed below are additional components of the actions that, after discussing options with SNF, NOAA Fisheries thinks are critical to the success of the proposed actions, and the SNF has accepted. NOAA Fisheries analyzed the proposed actions with these additional components. These components are also described as Terms and Conditions in the Incidental Take Statement in this Opinion (refer to Section VII, below), and are considered necessary to minimize incidental take.

1. Consultation Duration

The duration of the actions is the life of the permits (5 years), beginning in the summer of 2004, and continuing through the 2008 season.

2. River Closure Dates

Upper Section (floatboating only)

The upper section of the Salmon River (Buckhorn to Stanley) is closed to floating from August 15 through September 22 (last day of floating is August 14; re-open to floating September 23).

Lower Section (floatboating only)

The lower section of the Salmon River (Stanley to the eastern boundary of the SNF) is closed to floating from August 29 through September 22 (last day of floating is August 28; re-open to floating September 23).

Upper and Lower Section (Outfitted Walk/Wade Angling Only)

Closure dates do not apply (outside of Torrey's Hole and Indian Riffles, see below) to outfitted walk/wade angling. Outfitted walk/wade angling is restricted to staying a minimum of 150 feet from any redd as identified by SNF and/or the Permittee.

Closure to outfitted walk/wade angling will be implemented at Torrey's Hole on August 15.

Closure to outfitted walk/wade angling will be implemented at Indian Riffles on August 15.

3. Quiet Zones and Disturbance Minimizing Measures

Torreys Hole and Indian Riffles (designated quiet zones)

These measure will begin on August 15.

Individual 'Quiet Zones'

These will occur as redds are located and these will be identified with signs (minimum of 100 feet above and below redd).

Within quiet zones, SNF will implement measures (e.g., "river right/left signs, and other SNF communication tools with guides and floatboaters) using information on redd locations to help minimize incidents of disturbing/displacing spawning fish. "Quiet zone" rules and regulations shall include, but are not limited to: floatboaters and anglers remaining out of the water or within the boats throughout the entire designated areas, keeping paddling to a minimum, and avoiding excessive noise. Unnecessary paddling or other disturbances shall be avoided.

4. Monitoring

The SNF will conduct or oversee monitoring to identify redds and will use of this information to protect spawning fish.

Upper Section

The SNF will conduct or oversee daily monitoring August 5 through August 14.

Lower Section

The SNF will conduct or oversee daily monitoring August 15 through August 31.

Upper and Lower Section (Outfitted Walk/Wade Angling Only)

Upper Section: August 15 - End of Angling season (to be completed by Permittee)
Lower Section: August 31 - End of Angling season (to be completed by Permittee)

Outfitted Walk/Wade Angling permittee will monitor the section of river to be fished prior to conducting guided angling activities in the immediate area. The SNF will monitor the permittee's activities to ensure outfitter and clients are angling a minimum 150 feet away from any redd.

While redd identification is being deferred to the permittee/outfitter by the SNF from August 15, and August 31 to the end of the angling season, the SNF will continue to ensure compliance of these activities with the conditions of the Incidental Take portion of this Opinion.

The IDFG monitoring will occur approximately September 4. One final monitoring will occur approximately September 22. Final reports of monitoring activities will be completed by January 31 of the following year.

5. Boat Numbers

Upper Section

Unlimited number of boats per day are allowed from May 1 to August 14. Section closure will occur from August 15 until September 22. Unlimited number of boats per day are allowed from September 23 to the end of the floating season.

Lower Section

Unlimited number of boats per day are allowed from May 1 to August 14, and 48 boats per day from August 15 through August 28. Section closure will occur from August 29, until September 22. Unlimited number of boats per day are allowed from September 23, to the end of the floating season.

III. BIOLOGICAL INFORMATION AND CRITICAL HABITAT

An action area is defined by NOAA Fisheries regulations (50 CFR 402) as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." For the purposes of this analysis, the action area is: The upper Salmon River and its riparian zone within the SNRA, east of Stanley, Idaho, from above Redfish Lake Creek at Buckhorn Day Use Site downstream approximately 34 river miles to eastern SNRA boundary. This action area was defined considering potential impacts associated with floatboating and walk/wade activities. These activities potentially could result in harassment of fish and physical damage to redds and pre-emergent fry from floatboating and walk/wade activities. The entire action area contains designated critical habitat for spring/summer chinook salmon and sockeye salmon (December 28, 1993, 58 FR 68543). This area serves as a migratory corridor for juvenile and adult sockeye salmon, and also as a spawning and rearing area for Snake River spring/summer chinook salmon and Snake River steelhead.

Essential features of critical habitat for the affected listed species are: (1) Substrate, (2) water quality, (3) water quantity, (4) water temperature, (5) water velocity, (6) cover/shelter, (7) food (juvenile only), (8) riparian vegetation, (9) space, and (10) safe passage conditions. The majority of these essential elements of critical habitat or other relevant habitat characteristics are included in a NMFS (1996) analysis framework called *Making Endangered Species Act Determinations of Effect for Individual or Grouped Actions at the Watershed Scale* (hereafter referred to as the "matrix") (NMFS 1996). The SNF used the matrix to evaluate the environmental baseline condition and effects of the actions on essential habitat elements for affected Snake River spring/summer chinook salmon and steelhead.

Snake River sockeye salmon use the analysis area only as an adult and juvenile migration corridor to and from their spawning grounds at Redfish Lake. Migration occurs for juvenile Snake River sockeye salmon during the high flows in late spring. Adults migrate up river during early summer and pass through the action area rapidly, holding in deep pools during the day and moving during the early morning hours (SNF Upper and Lower Canyon Subpopulations BA, 2002). Taking this into account, the impact of floatboaters and walk/wade angling on sockeye salmon is negligible. NOAA Fisheries therefore concurs with the finding of may affect, not likely to adversely affect (NLAA), by the SNF regarding Snake River sockeye salmon, and will not address sockeye salmon further in this Opinion.

Snake River steelhead have been documented within the action area. The upper reaches of the Salmon River including the action area provide habitat used by steelhead for migration, spawning and rearing. All steelhead within the Snake River Basin are summer steelhead and for management purposes are divided into A-run and B-run fish (Busby et al 1996). Spawning in the upper Salmon occurs during April and May. With higher spring flows during the time of steelhead spawning and emergence of fry (personal communication, Mark Moulton, Hydrologist, Sawtooth National Forest, 2002) and the limited use of the river by floatboaters during April and

May, the proposed actions are expected to have a negligible effect on steelhead. NOAA Fisheries therefore concurs with the SNF finding of may affect, NLAA regarding Snake River steelhead, and will not address steelhead further in this Opinion.

The uppermost reach of the Salmon River contains an important subpopulation of Snake River spring/summer chinook salmon. These adult salmon travel over 900 miles from the Pacific Ocean to complete their life cycle. The upper reaches of the Salmon River provide habitat used for migration, spawning and rearing by spring/summer chinook salmon. The three major spring/summer chinook salmon spawning sites within the action area are Buckhorn Picnic Area (MP184.4), Indian Riffles (MP 205.3) and Torrey's Hole (MP 210.6).

Because of the distance these subpopulations of chinook salmon travel and their depleted energy reserves, human-induced disturbances of pre-spawning or spawning salmon could result in premature death or reduced reproductive success. Low numbers of returning adult salmon increases the importance of each fish that successfully migrates to the area. Life history information for this species is further discussed below (Section IV B).

IV. EVALUATING PROPOSED ACTIONS

The standards for determining jeopardy are set forth in section 7(a)(2) of the ESA as defined by 50 CFR 402 (the consultation regulations). In conducting analyses of habitat-altering actions under section 7 of the ESA, NOAA Fisheries uses the following steps of the consultation regulations combined with the Habitat Approach (NMFS 1999): (1) Consider the biological requirements and status of the listed species; (2) evaluate the relevance of the environmental baseline to the species' current status; (3) determine the effects of the proposed or continuing action on listed species; (4) determine whether the species can be expected to survive with an adequate potential for recovery under the effects of the proposed or continuing action, the environmental baseline and any cumulative effects, and considering measures for survival and recovery specific to other life stages; and (5) identify reasonable and prudent alternatives to a proposed or continuing action that is likely to jeopardize the continued existence of the listed species.

A. Biological Requirements

The first step in the method NOAA Fisheries uses for applying the ESA standards of section 7(a)(2) to listed salmon is to define the species' biological requirements that are most relevant to each consultation. Relevant biological requirements are those necessary for the listed salmon to survive and recover to naturally reproducing population sizes at which protection under the ESA would become unnecessary. This will occur when populations are large enough to safeguard the genetic diversity of the listed salmon, enhance their capacity to adapt to various environmental conditions and allow them to become self-sustaining in the natural environment. "For delisting to be considered, the 8 year (approximately two generations) geometric mean cohort replacement rate of a listed species must exceed 1.0 during the 8 years immediately prior to delisting. For spring/summer chinook salmon, this goal must be met for 80% of the index areas available for natural cohort replacement rate estimation" (Proposed Snake River Recovery Plan; NMFS 1995). NOAA Fisheries has also identified in a letter from Robert (Bob) Lohn, NOAA Fisheries Northwest Region Regional Administrator, to Frank Cassidy of the Northwest Power Planning Council an interim target recovery level of 41,900 fish for Snake River spring/summer chinook salmon (April 4, 2002, Interim Abundance and Productivity Targets for Interior Columbia Basin Salmon and Steelhead Listed under the Endangered Species Act). The survival and recovery of the species will depend on its ability to persist through periods of low natural survival.
In addition to the population replacement rate and recovery target population size noted above, for this consultation, the relevant biological requirements include habitat elements such as water quality, habitat access, space, cover, and other watershed conditions that function to support successful adult and juvenile migration, adult holding, spawning, incubation, and rearing.

B. Status of Species

NOAA Fisheries considers the current status of the listed species taking into account population size, trends, distribution and genetic diversity. To assess the current status of the listed species within the action area, NOAA Fisheries starts with the determinations made in its decision to list for ESA protection the Evolutionarily Significant Units (ESU) considered in this Opinion, and also considers any new data that is relevant to the determination. This section covers listing status, general life history and population growth rates of species.

The proposed actions may affect the ESA-listed species and designated critical habitat identified below in Table 1. Based on life history timing for these ESUs, incubating egg, juvenile, smolt and adult life stages of these listed species may be affected by the proposed actions.

Table 1. References for Additional Background on Listing Status, Protective Regulations and Critical Habitat Elements for the ESA-Listed and Candidate Species Considered in this Consultation.

Species ESU	Status	Critical Habitat	Protective Regulations
Chinook salmon (*O. Tshawytscha*)			
Snake River spring/summer	Threatened; April 22, 1992; 57 FR 14653[1]	October 25, 1999; 64 FR 57399[2]	July 10, 2000; 65 FR 42422
Sockeye salmon (*O. nerka*)			
Snake River	Endangered; November 20, 1991; 56 FR 58619	December 28, 1993; 58 FR 68543	ESA section 9 applies
Steelhead (*O. mykiss*)			
Snake River Basin	Threatened; August 18, 1997; 62 FR 43937		July 10, 2000; 65 FR 42422

As noted above, steelhead and sockeye salmon will not be further discussed in this Opinion, as NOAA Fisheries concurs the proposed actions are not likely to adversely affect these species.

Snake River spring/summer chinook salmon

The present range of spawning and rearing habitat for naturally-spawned Snake River spring/summer chinook salmon is primarily limited to the Salmon, Grande Ronde, Imnaha and Tucannon River subbasins. Most Snake River spring/summer chinook salmon enter individual subbasins from May through September. Juvenile Snake River spring/summer chinook salmon emerge from spawning gravels from February through June (Perry and Bjornn 1991). Typically, after rearing in their nursery

[1]Also see June 3, 1992; 57 FR 23458, correcting the original listing decision by refining ESU ranges.

[2]This corrects the original designation of December 28, 1993 (58 FR 68543) by excluding areas above Napias Creek Falls, a naturally impassable barrier.

streams for about one year, smolts begin migrating seaward in April and May (Bugert et al 1990; Cannamela 1992). After reaching the mouth of the Columbia River, spring/summer chinook salmon probably inhabit nearshore areas before beginning their
northeast Pacific Ocean migration, which lasts 2 to 3 years. For detailed information on the life history and stock status of Snake River spring/summer chinook salmon, see Matthews and Waples (1991), NMFS (1991a), and 56 FR 29542 (June 27, 1991).

Bevan et al (1994) estimated the number of wild adult Snake River spring/summer chinook salmon in the late 1800s to be more than 1.5 million fish annually. By the 1950s, the population had declined to an estimated 125,000 adults. Escapement estimates indicate that the population continued to decline through the 1970s. Redd count data also show that the populations continued to decline through about 1980.

Snake River wild spring/summer chinook salmon runs, as counted at the Lower Granite dam, have dwindled from an average of about 60,000 adults in the early to mid-1960s to a few thousand in recent years. Over the last 10 years (1992 to 2001), which includes the year of listing (1992), returns of wild/natural fish ranged from 183 in 1994, to 12,475 in 2001 and averaged 3,314. The estimated smolt production capacity of 10 million smolts for rivers in Idaho, coupled with historic smolt to adult return rates of two percent to six percent, indicate Idaho could produce wild/natural runs of 200,000 to 600,000 adults (Fish Passage Center 2002). The recent low numbers are reflected throughout the entire distribution of the chinook salmon subpopulations scattered throughout the Grande Ronde, Imnaha, and Salmon River Basins. The percentage of adult fish that actually return to the upper Salmon River above North Fork of the Salmon River is approximately five percent of upper Salmon River origin juvenile fish passing Lower Granite Dam (Bjornn et al 1998).

Even though in 2001 and 2002 there were record returns, numbers are in general very low in comparison to historic levels (Bevan et al 1994). Average returns of adult Snake River spring/summer chinook salmon (averaging 3,314 over the last 10 years) are also low in comparison to interim target species recovery levels of 41,900 for the Snake River Basin
(April 4, 2002, Interim Abundance and Productivity Targets for Interior Columbia Basin Salmon and Steelhead Listed under the Endangered Species Act). The low returns amplify the importance that a high level of protection be afforded to each adult chinook salmon, particularly because a very small percentage of salmon survive to the life stage of a returning, spawning adult, and because these fish are in the final stage of realizing their reproductive potential (approximately 2,000 to 4,000 progeny).

The Snake River spring/summer chinook salmon ESU, listed as threatened on April 22, 1992,
(67 FR 14653), includes all natural-origin populations in the Tucannon, Grande Ronde, Imnaha, and Salmon Rivers. Some or all of the fish returning to several of the hatchery programs are also listed including those returning to the Tucannon River, Imnaha, and Grande Ronde hatcheries, and to the Sawtooth, Pahsimeroi, and McCall hatcheries on the Salmon River. Critical habitat was designated for Snake River spring/summer chinook salmon on December 28, 1993,
(58 FR 68543) and was revised on October 25, 1999, (64 FR 57399).

NOAA Fisheries estimates that the median population growth rate (lambda) for Snake River spring/summer chinook salmon over the base period[3] ranges from 0.94 to 0.66 (demonstrating a decline in species abundance) with greater declines predicted as the assumed effectiveness of hatchery fish spawning in the wild increases compared to the effectiveness of fish of wild origin (NMFS 2000). NOAA Fisheries has also estimated the risk of absolute extinction for the Snake River spring/summer chinook salmon, sockeye and steelhead stocks,[4] using the same range of assumptions about the relative effectiveness of hatchery fish.

C. Environmental Baseline

The environmental baseline includes "the past and present impacts of all Federal, state or private actions and other human activities in the action area, including the anticipated impacts of all proposed Federal projects in the action area that have undergone section 7 consultation and the impacts of state and private actions that are contemporaneous with the consultation in progress" (50 CFR 402.02). In step 2 of this analysis, NOAA Fisheries evaluates the relevance of the environmental baseline in the action area to the species current status. In describing the environmental baseline, NOAA Fisheries emphasizes essential elements of designated critical habitat or habitat indicators for the listed salmonid ESUs affected by the proposed actions. NOAA Fisheries does not expect any other areas to be directly or indirectly affected by the proposed actions.

The biological requirements of the listed species are currently not being met under the environmental baseline. Their status is such that there must be a significant improvement in the environmental conditions of the critical habitat (over those currently available under the environmental baseline). Any further degradation of these conditions would have a significant impact due to the amount of risk the listed salmon presently face under the environmental baseline. In general, the environment for salmonids in the Columbia River Basin, including those that migrate past and downstream of the action area, has been dramatically affected by the development and operation of the Federal Columbia River Power System. Forestry, farming, grazing, road construction, hydropower system development, mining and urbanization have also greatly reduced the quantity and quality of habitat compared to historic conditions in much of the basin.

The actions of floatboating and walk/wade area are located on the upper Salmon River, in the SNRA, SNF, east of Stanley, Idaho. The total area includes approximately 34 river miles, from above Redfish Lake Creek at Buckhorn Day Use Site downstream to eastern boundary of the SNRA. The river

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3 Estimates of median population growth rate, risk of extinction, and the likelihood of meeting recovery goals are based on population trends observed during a base period that begins in 1980 but varies in length between subbasin populations. Population trends are projected under the assumption that all conditions will stay the same into the future.

4 McClure et al (2000) have calculated population trend parameters for additional Snake River spring/summer chinook salmon stocks.

reach flows north in a wide valley between the Buckhorn Day Use Site and Lower Stanley downstream and is bounded by gently sloping grazing lands on the east toward Sunbeam Dam and the mouth of the Yankee Fork with the gently sloping streambanks leading into steep canyon walls. The reach from Sunbeam Dam at the mouth of Yankee Fork downstream to Torrey's Hole, a distance of approximately 8 miles is a deeply-incised natural channel with predominantly bedrock and large boulders. State Highway 75 parallels the river to the north in the canyon. By mid-July the segment from Buckhorn Day Use Site to Sunbeam Dam usually becomes too shallow and is avoided by many floaters in preference for conditions downstream of the Yankee Fork confluence.

The entire action area is located within the current and historic range of wild Snake River spring/summer chinook salmon. Approximately 9 acres of high quality spawning substrate are found in a total of about 1.25 miles of river reaches scattered between Sunbeam Dam and Torrey's Hole. Between Sunbeam Dam and the farthest downstream floatboat take-out at Whiskey Flat, two large spawning areas, Indian Riffles and Torrey's Hole, provide both present and historic spawning grounds for chinook salmon. Throughout this river segment, suitable salmon-spawning substrate gravels are found in a number of locations scattered outside the Indian Riffles and Torrey's Hole sites. Salmon spawning in this area are predominantly wild spring/summer chinook salmon with little hatchery influence (personal communication, Mark Moulton, Hydrologist, Sawtooth National Forest, 2002). This area also provides rearing habitat for juvenile chinook salmon.

As outlined in the Matrix of Pathways and Indicators provided by the SNF, the existing habitat conditions in the action area, including all of the tributaries associated with these river segments, have been assessed as follows:

Table 2. Matrix of Pathways and Indicators (MPI)
(Upper and Lower Canyon, and the Sawtooth Valley AA BA)

	NSBC	CAHR	PEHO
WATER QUALITY			
temperature	FR	FR	FR
sediment	FR	FR	FR
chemical contaminants	FA	FA	FR
HABITAT ACCESS			
physical barriers	FR	FA	UR
HABITAT ELEMENTS			
substrate embeddedness	FR	FR	FR
large woody debris (LWD)	FA	FA	FA
pool frequency	FR	FA	FR
pool quality	FR	FR	FR
off-channel habitat	FR	FA	FR
refugia	FR	FR	UR
CHANNEL CONDITIONS & DYNAMICS			
width/depth ratio	FR	FR	FR
streambank condition	FR	FR	FR
floodplain connectivity	UR	UR	FR
FLOW/HYDROLOGY			
change in peak/base flows	FR	FA	UR
drainage network increase	FA	FA	FA
WATERSHED CONDITIONS			
road density and location	FR	FA	FR
disturbance history	UR	FR	FR
riparian conservation area	FR	FR	FR
disturbance regime	FR	FR	FR
integration of species and habitat conditions	FR	FR	FR

FA=Functioning Appropriately; FR=Functioning at Risk; UR=Functioning at Unacceptable Risk

As indicated in Table 2, habitat conditions in the action area are generally functioning at risk. This is due to historic and current factors such as; water diversions, Highway 75 adjacent to the river, grazing, timber harvest, mining, etc. that have contributed to reductions in habitat condition. The issuance of SUP for commercial floatboat and walk/wade angling activities have had negligible effect on physical habitats. There is, however, potential for these activities to have a negative effect on reproduction success and thus on the population growth rate. This potential was considered reduced to a negligible level via measures implemented through the previous informal consultations and extensions (1996 to 2002).

Regarding the species status, generally, and its population biological requirements, salmonid populations are also substantially affected by variation in the freshwater and marine environments. Ocean conditions that are a key factor in the productivity of Northwest salmonid populations appear to have been in a low phase of the cycle for some time and are likely an important contributor to the decline of many stocks. The survival and recovery of these species will depend on their ability to persist through periods of low natural survival due to ocean conditions and other condition outside the action area. Within the action area, maintaining/increasing survival rate (e.g. through avoiding and minimizing take) along with restoring of properly functioning conditions of essential habitat features will be important for sustaining the population through periods of reduced survival outside the action area. Additional details about the effects can be found in Federal Caucus (2000), NMFS (2000), and Oregon Progress Board (OPB) (2000).

V. ANALYSIS OF EFFECTS

A. Effects of Proposed Actions

Background on Boat Number and User Days

A total of 11,203 person-days of use are allowed on the Salmon River under the proposed commercial floatboating special use permit. This number is unchanged from the previous permit period, and as described in the Salmon River Corridor FEIS (1996).

In the initial SNF proposed federal action there is no permit stipulation regarding boat numbers. The outfitters generally use two types of water craft in their operations: six-eight person inflatable rafts, and inflatable kayaks. Under the previous permit, boat numbers were limited to eight boats per day, per permit (48 total) between August 10 and September 21. Since 1996, the maximum number (48) has never been reached in a single day, with the average less than 30 in August, and decreasing substantially in September (memo, Sawtooth National Forest, Mark Moulton, Hydrologist, April 25, 2002).[5]

These numbers do not reflect private (non-outfitted) floatboaters. In 1995, during the period August 20 to September 30, private boats accounted for an estimated 34% of the total boats, under unrestricted conditions. With the complex late season floating requirements in place since 1996, use by private floatboaters has declined in August and September. As reported earlier, this non-outfitted use is an estimated amount, based on self issued permits and monitoring. Pending new data on non-commercial use, NOAA Fisheries assumes this use remains slightly less than or equal to commercial boat numbers.

[5] The 48 boats per day was not reached perhaps because of the limits placed on each outfitter, and that all outfitters were not operating their allowed maximum number of boats on a given day. The 1994 monitoring report states that an average number of guests per boat for the period was 3.5.

Compared to the previous floatboating action on which NOAA Fisheries consulted in 1995 and 2001, the proposed action enables boats to pass through sections of river that have identified redds, whereas those sections (because of the redds) would have been avoided or portaged around under the previous ESA consultation. The proposed actions, however, apply redd survey information, quiet zone behavior, and boat maneuvering guidance to minimize effects from not closing those sections with early redds. In addition, the proposed action closes the entire river to commercial floatboats near the end of August, a time when spawning activity historically begins to increase, whereas the river remained open through peak spawning (albeit with sections portaged or avoided when redds identified) under the previous consultation. Because the river is not open in September, it is likely that total daily boat numbers in August may increase in comparison to 1995 to 2001 boat numbers. "From these related data sources, and our experience, our best estimate would be an average of 30 to 50 boats per day would use the permitted area during the month of August" (Mark Moulton, Hydrologist, Sawtooth National Forest,
April 25, 2002, memorandum). This number is an estimate of the total number of commercial and non-commercial boats.

The effects that would be caused by an unlimited number of boats are not quantifiable. In order to reduce the potential impact of excessive boat traffic during the spawning season, a limit of 48 outfitted boats per day was established for August 15, extending through the dates of total river closure (August 15, upper section and August 29, lower section).

A total number of 300 priority use service days would be authorized under the proposed actions of walk/wade permits. This number, as described above, represents the maximum number of people that can be guided for walk/wade angling during the permitted season. Four outfitters would be authorized to guide during the steelhead season, March 1, to April 30. One of these permits would also include the resident trout season from the Friday prior to Memorial Day (approximately June 1) to November 30.

Effects

The effects on listed species associated with the SNF authorization of commercial floatboating and walk/wade angling and management of non-commercial float access points are described below. The effects of the action as defined by 50 CFR 402.02 include direct and indirect effects of the action as well as effects of interrelated and interdependent actions that will be added to the environmental baseline. The proposed actions could directly or indirectly affect adult Snake River spring/summer chinook salmon redd pre-selection and selection, redd pre-construction and construction, pre-spawning and spawning behaviors, and egg and pre-emergent fry survival of Snake River spring/summer chinook salmon. Effects on individual salmon adults, eggs or pre-emergent fry can significantly affect short-term and long-term population viability due to the low number of adults expected to return as spawners in most years. Although returning numbers were relatively high in 2001 and 2002 (e.g., 676 natural spawners returned to the Sawtooth weir in 2001) and may indicate a growth in returns, numbers are still well below interim recovery target number of approximately 5,100 wild/natural spawners within the upper Salmon River basin, necessary to achieve

recovery of the species (April 4, 2002, Interim Abundance and Productivity Targets for Interior Columbia Basin Salmon and Steelhead Listed under the Endangered Species Act).

Behavioral responses and habitat conditions associated with redd pre-selection, redd selection, redd pre-construction, redd construction, and pre-spawning periods are difficult to identify, yet very important to successful spawning. Waiting until redd construction and spawning activities are identified before implementing protective measures may not afford adequate protection of redd pre-selection, redd pre-construction and pre-spawning behaviors and could affect spawning success.

Floatboating and walk/wade angling activities can disturb and displace salmon from their redds. As stated in the SNF 1995 BA the "Effects of Main Salmon River Floatboating Activities on Snake River Sockeye Salmon and Snake River Spring/Summer Chinook Salmon": "Between September 3, 1993 to September 9, 1993 a series of studies was conducted by Jill Dufour, Sawtooth NRA Fisheries Biologist, to determine the effects of boating on spawning chinook salmon. The studies were based on direction in the 1992 Biological Opinion and were set up around three objectives:

- To determine if spawning was localized to distinct areas (thus making buoyed-corridor type mitigation and spawning effective).

- To determine if spawning was taking place 24 hours per day. (To determine the overlap between peak rafting periods and the entire spawning period)

- To determine if buoyed corridors were effective mitigation in terms of their ability to prevent fish disturbance.

These studies were used to assess effects, and were not designed to monitor incidental take.

Briefly, the results of these studies were as follows:

- Eleven percent of the (combined) rafts, kayaks and inflatable kayaks that passed by spawning pairs of salmon caused fish to move from their redds. Over a 10 day monitoring period, 102 displacements of fish were observed. Displacement was defined as an obvious movement of the fish off of the redd in response to human activity. Most of these fish returned to their spawning locations. Distances between the passing boats and fish were not measured but the buoyed corridor was set approximately 25 feet from the nearest redds. Disturbance was largely the result of people going between the buoys and the redds, although displacement also occurred from floatboat activity outside of the protected zones. Most disturbed fish returned to their redds quickly when this occurred, although in some instances, no return was documented during the observation period. The resulting energy expenditure and effects on spawning success could not be determined."

During the pre-spawning period, the potential effects, as a result of floating, or guiding angling clients, through spawning habitats, would be to disrupt natural site selection behavior of some chinook by

introducing a perceived threat that would drive the pair to other, potentially less suitable, habitats, or delay spawning, or perhaps cause spawning to be abandoned altogether. In 1994 a female chinook salmon abandoned a partially completed redd on a broad deposit of spawning gravel just above Shotgun Rapids following heavy pressure from anglers over the Labor Day weekend. This same fish was later believed to have constructed another redd in a pocket of gravel within a boulder dominated reach of river, with much greater water velocity (SNF 2002 Upper and Lower Canyon Subpopulations BA).

For chinook salmon actively spawning prior to August 29, passing boats, or a nearby guided angling client could potentially displace fish and reduce adult energy reserves or cause damage to eggs. Energy reserves could be consumed from frequent disturbance or displacement from the redd, or perhaps the abandonment of a partially completed redd to begin anew. The carcass of the female salmon for 1994 (mentioned above), that was believed to have abandoned one redd due to disturbance, was retrieved by IDFG. When retrieved, 950 eggs remained in her egg cavity undeposited. Other carcasses evaluated the same year were essentially absent of residual eggs (SNF 2002 Upper and Lower Canyon Subpopulations BA). Monitoring Reports since 1994, as well as other studies in the area in the mid 1990's (Dufour 1995), demonstrate that boats can disturb chinook salmon from their redds.

Displacement of salmon from redds disrupts spawning activities

Since upper Salmon River salmon have traveled more than 900 miles from the Pacific Ocean to reach these spawning areas, they have limited energy reserves for spawning. Displacement of salmon from redds may result in incomplete redd construction, selection of less preferred redd sites, and incomplete spawning. These occurrences could reduce the number of fry emerging from the gravels the following spring. Incomplete spawning includes eggs not released from the female, egg scattering, inadequate coverage of the eggs, and eggs released at redd depths insufficient to foster proper incubation.

Once spawning is complete, redds would again be exposed to floating and guided walk and wade angling. Potential impacts to redds during the post-spawning period include physical damage to redds by dragging water craft and wading on or over redds and crushing eggs by walking on redds. When these activities do occur in the incubation and pre-emergent periods, effects could result to eggs or alevins when an activity comes in contact with the riverbed, such as grounding of boats, or pushing, scraping, or anchoring with oars, or wading. The more piercing or compact the pressure the greater the potential for an impact on the buried eggs (SNF 2002 Upper and Lower Canyon Subpopulations BA, CAHR-12, All Aquatics BA). The trampling of redds by anglers and/or floatboaters could cause mortality of eggs and pre-emergent fry (Roberts and White 1992). Disturbance of spawning activities or pre-emergent life stages (eggs or alevins) can contribute to reduced production of the upper Salmon populations of chinook salmon and therefore can reduce the probability of survival of the species.

Measures to Avoid/Minimize Adverse Effects

To reduce potential impacts associated with floatboat and walk/wade angling activities, river closure dates have been set based on the average timing of the onset of the primary spawning period. The SNF determined the average timing of the onset of this period by identifying the first notable upward trend on a bell curve in spawning activity as plotted to graph of new redd numbers, by day, based on temporal spawning data collected over the last 10 years. The onset of spawning is, therefore, defined in this consultation as the time during which a steady development of redds first became apparent. A few redds were typically observed prior to the onset of this defined primary spawing period.

Based on the data set (AA BA NSBC-reca 10, CAHR -reca 11, PEHO 17) the average date of the spawning onset[6] for summer chinook salmon is August 30, for the areas below Redfish Lake Creek, which falls within the NSBC, CAHR and PEHO sections of the action area. To provide protection for federally listed species at the onset of spawning activity, the lower section of the action area will close on August 29, as noted in section II (A) Proposed Actions Modifications and/or Additions (above).

There were fewer data available (AA BA NSBC-reca 10a) for determining a specific average spawning onset date for chinook salmon in the upper section of the action area, from Buckhorn Picnic Area (MP 184.4) to Salmon River Bridge/Stanley (MP 189.9). The SNF estimated the average spawning onset date is August 15, in the upper section, and thus propose closing the upper section and its access areas on August 15. This date provides a starting point, and should be further verified (as should the August 30, spawning onset date for the lower section), using the daily redd monitoring that SNF will continue to conduct or oversee.

The timing of primary "spawning onset" varies from year to year. The timing can be affected by factors such as instream water flows, water temperature, total number fish present, available amount of effective spawning habitat, and water chemistry. NOAA Fisheries took this variability into account in assessing potential effects on listed salmon, and examined previous years' data from SNF to understand what approximate proportion of the spawning activity would be potentially impacted by floatboating. According to the data, a range of five percent to 11% of the chinook salmon redds in the upper portion of the action area were formed prior to August 15, in previous years. Similarly, a range of four percent to 14% of the chinook salmon redds in the lower portion of the action area were formed prior to August 29, in previous years. These
percentages give an indication of the proportion of the run that would be exposed to floatboating, and it is for this early portion of the run that the conservation measures discussed below were designed and evaluated.

6 This is a point estimate average based on a range of a few days from each year during which a steady development of redds first became apparent.

A key aspect of avoiding or minimizing effects to spawning fish and redds is the identification of redds through "daily surveys". To fully monitor the entire 34 miles of river (comprehensive survey), requires two days by a single person. The upper section will be monitored from August 5 to August 14 and can be completed in a single day. The lower section will be monitored from August 15 to August 31; however due to it's length (approximately 21 miles), it takes more than one day to complete the "daily survey" on this section of the river. To maintain consistency, only one person is used for the entire 34 miles.

The surveys cover the period from August 5 to 14 (upper section) and August 15 to 31 (lower section). The daily surveys would be essentially the same as those completed over the last several years. That is, these would be ground based coverage of known spawning areas (e.g., Buckhorn Picnic Area, Torrey's Hole and Indian Riffles) and other accessible river reaches. The comprehensive IDFG aerial survey, that has been done over the last several years, provides a basis for evaluating the accuracy of the daily surveys in locating redds. The effectiveness of the surveys in locating all or nearly all of the redds should continue to be evaluated. Results from a standard daily ground based survey should be compared with results of an aerial survey during the same time frame.

"Quiet zones" are another measure to be implemented prior to the closure of the river to protect the subset of fish that spawn (including pre-spawning behaviors) prior to August 15, in the upper section and August 29, in the lower section. Quiet zones, if well implemented, can minimize disturbance of spawning fish and redds by floatboating and walk/wade angling activities. There will be two designated quiet zones (Torrey's Hole and Indian Riffles), as well as "quiet zones" around (a minimum of 100 feet above and below) every identified redd. The redds will be identified by qualified personnel on one day and their location(s) reported to the guides by SNF staff on the following day. By reporting the location(s) of the redd(s) identified the 1 to 2 days prior, the floating and angling guides can better plan their daily trips and successfully maneuver around redds at a distance that may not disrupt spawning fish. The quiet zones will also help avoid/reduce effects on spawning fish from walk/wade guided fishermen, because anglers must remain out of the water (on shore) in these areas.

Successful implementation of quiet zones will require frequent communication between the SNF staff and commercial guides, and effective communication with non-commercial floatboaters so they too will know the quiet zone locations and the maneuvering needed to avoid floating over redds. Signs would be posted on the river to designate quiet zones and provide directions needed to avoid redds (e.g., "river right/river left"). Other communication tools have not been specifically described. Also, the SNF has not identified a contingency if redds are numerous and/or situated such that floatboaters will not likely be able to maneuver past the redds without continually disturbing spawning fish.

In conjunction with the "quiet zones," SNF will frequently inform and educate river users. The most important information to relay to river users will be the current status of spawning activity and related conservation measures. The SNF will communicate with guides as redds are

identified, maintaining an awareness by river users of the need for salmon protection and enhancement. This daily educational outreach of the guides and the general "floating and angling" public will play an important role in the management of the Salmon River.

To control the potential for impacts on spring/summer chinook salmon and continue to provide opportunity for the recreational businesses occurring on the Salmon River, a limit of 48 boats per day has been set, beginning August 15, and continuing through August 29 (lower section), the upper section is closed to floating starting August 15. The 48 boats per day is the same number of boats permitted under the current consultation. While the boat limit is not new, the passing of up to 48 boats through river reaches with identified active spawning is a notable change from the previous consultation.

The proposal to avoid/minimize disturbance to spawning fish, while permitting a number of boats to pass through the river reaches with those fish, hinges particularly on these things:
(1) identification of redds in surveys, (2) the SNF assessment of viable routes through those river reaches that prevent boaters from passing over or near redds, (3) effective transfer of information from SNF to the outfitters and non-commercial floatboaters regarding salmon redds and related conservation measures, and (4) effective implementation of the measures (e.g., quiet zones and redd-avoidance measures) by the floatboaters. The use of qualified river guides, with the knowledge and ability to maneuver their boats around identified redds, will help reduce the potential for disturbance and displacement of spawning salmon. That relatively few redds are expected to be present (based on previous years' data) during the time the river and access points are open adds to the feasibility of maneuvering boats successfully away from redds.

The possibility for mistaken routes (over or near redds) does, however, increase with the number of boats. While it is not clear that 48 boats (for commercial floatboaters) or some other number sufficiently ensures effectiveness in avoiding/minimizing disturbances of salmon, this limit on boat numbers ensures a finite amount of usage, which should be closely monitored and adjusted if not effective.

The number of non-outfitted boats floating the upper main Salmon River varies greatly between years. The SNRA tracks non-outfitted use through the self-issue permit system. Over the past 4 years, the highest use rate was in 2000 with 1204 registered boats and the lowest in 2001 with 357 registered boats (SNRA Floatboat Monitoring Report 2001). The SNF has jurisdiction over access to the river from lands administered by the SNF. This component of the proposed actions (access site closures in keeping with river closures to commercial floatboating), should help to minimize the impact of all floatboaters (private and commercial) on the river and reduce the potential effects on listed Snake River chinook salmon. Additional measures including redd identification monitoring and avoidance measures, and quiet zones, as discussed above, will also minimize the effects of private floatboaters.

Summary of Effects

The proposed actions can be effective in avoiding or greatly minimizing disturbance to spawning fish. Several components of the proposed actions will need careful evaluation through monitoring, and possibly adjustment based on the monitoring results. In brief, NOAA Fisheries relies primarily on the following components of the proposed actions to minimize adverse effects on ESA listed spring/summer chinook salmon:

1. Timing of river and access closures indicate less than 15% of the redds will be present when the river and access points are open to floatboating;

2. Daily redd monitoring that provides up to date information on redd locations;

3. Effective transfer of information from SNF to guides and other floatboaters, particularly regarding quiet zones and routes to avoid redds;

4. Consistent implementation by floatboaters of quiet zone rules and redd-avoidance measures; and,

5. Monitoring, particularly of the above four elements.

B. Cumulative Effects

Cumulative effects are defined in 50 CFR 402.02 as "those effects of future state or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." For the purposes of this analysis, the action area encompasses the upper Salmon River and the riparian zone on the SNRA, near Stanley, Idaho, from above Redfish Lake Creek at Buckhorn Day Use Site downstream approximately 34 river miles to the SNRA east Boundary.

A foreseeable state action that will affect the action area is the upper Salmon River Basin Conservation Memorandum of Understanding between the State of Idaho, NOAA Fisheries (Northwest Region), and U.S. Fish and Wildlife Service (Region 1). That agreement is in final form and is being circulated for signature as of the writing of this Opinion. The agreement may have a number of results in terms of reducing effects of private land activities on listed salmon and their habitat. Of those possible effects, water conservation that results in increased instream flow in the upper Salmon River is reasonably certain to occur (as this is a focal point of the agreement, and this is patterned after the May 15, 2002, Lemhi River Agreement between NOAA Fisheries, Northwest Region, and the State of Idaho, which has had the effect of increasing instream flows). The expected increase in flows cannot be quantified at this time, though initial discussions between the parties of this agreement have mentioned a 70 cubic feet per second (cfs) increase as a possible goal. Increases in instream flow in the upper Salmon River

should, with added depth and floatable width in the river, generally increase the ability of floatboaters to avoid disturbing spawning fish. In balance, however, increased flow may also tend to increase the amount of floatboating (commercial and non-commercial) in the upper Salmon River, and increase the potential for adverse affects on salmon. The commercial floating has the limit of 48 boats during the early spawning period; however the non-commercial floating is not limited and may increase with favorable flows.

Another foreseeable state action that will affect the action area is a state timber sale on portions of the 640-acre section of land surrounding the fish hatchery on the upper Salmon River, approximately 6 miles upstream from Stanley, Idaho. This action would occur under the stipulations of the Idaho Forest Practices Act (IFPA), which can involve harvest and mechanized equipment (with restrictions) in riparian areas and can have the effect of delivering sediment to the Salmon River in the action area. The activity, because of its relatively small acreage and limited amount of potentially affected riparian areas and because of restrictions to activities through IFPA, is not expected to result in substantial delivery of sediment that significantly changes spawning and rearing habitat in the upper Salmon River. This activity may, however, add another small increment of degradation to the habitat conditions noted in the environmental baseline (Section IV. C., above), and as such reaffirms the need for minimizing affects on the species and its habitat through other activities (e.g., hydropower, harvest, and Federal and non-Federal land management, including floatboating).

Future Federal actions, including the ongoing operation of hydropower systems, hatcheries, fisheries, and land management activities are being (or have been) reviewed through separate section 7 consultation processes. In addition, non-Federal actions that require authorization under section 10 of the ESA will be evaluated in section 7 consultations. Therefore, these actions are not considered cumulative to the proposed actions.

VI. CONCLUSION

NOAA Fisheries has determined that, based on the available information, the reissuance of floatboat and walk/wade angling SUPs, and management of non-commercial floating via access points from the start of the floating season in 2003 until the close of floating season in 2007, are not likely to jeopardize the continued existence of Snake River spring/summer chinook salmon or result in the destruction or adverse modification of critical habitat. The level of effects on salmon critical habitat is negligible by virtue of the nature of the actions, which involve primarily wading and floating. Take related to habitat modification is not anticipated. The actions do have the potential, however, to harass spawning fish and harm incubating eggs. NOAA Fisheries finds that measures to avoid or minimize those adverse effects are sufficient to avoid jeopardy to the species. Key measures include: (1) Closure dates, (2) Monitoring and feedback, (3) Quiet zones and redd avoidance measures for the two primary spawning areas and other identified redd locations, (4) Education and communication, and (5) Commercial boat limits during spawning time periods.

VII. INCIDENTAL TAKE STATEMENT

The ESA at section 9 [16 USC 1538] prohibits take of endangered species. The prohibition of take is extended to threatened anadromous salmonids by section 4(d) rule [50 CFR 223.203]. Take is defined by the statute as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" [16 USC 1532(19)]. Harm is defined by regulation as "an act which actually kills or injures fish or wildlife. Such an act may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavior patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering" [50 CFR 222.102]. Harass is defined as "an intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering" [50 CFR 17.3].

Incidental take is defined as "any taking otherwise prohibited, if such taking is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity" [50 CFR 17.3]. The ESA at section 7(o)(2) removes the prohibition from incidental taking that is in compliance with the terms and conditions specified in a section 7(b)(4) incidental take statement.

The measures described below are non-discretionary; they must be implemented by the action agency so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The SNF has a continuing duty to regulate the activity covered in this incidental take statement. If the SNF (1) fails to require the applicant to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, (2) fails to retain the oversight to ensure compliance with these terms and conditions, (3) fails to monitor compliance, and/or
(4) fails to take action to correct non-compliance, the protective coverage of section 7(o)(2) may lapse.

An incidental take statement specifies the impact of any incidental taking of endangered or threatened species. It also provides reasonable and prudent measures that are necessary to minimize impacts and sets forth terms and conditions with which the action agency must comply in order to implement the reasonable and prudent measures.

A. Amount or Extent of the Take

There is a reasonable certainty the proposed actions will result in incidental take of ESA listed Snake River spring/summer chinook salmon. NOAA Fisheries is reasonably certain the incidental take described in this Opinion will occur because (1) recent and historical surveys indicate this listed species is known to occur in the action area, and (2) the permitted activities are reasonably certain to harass listed fish or injure their eggs.

Reports from 1995 to 2001 indicate only one case of abandonment of an incomplete salmon redd or incident of a salmon spawning redd being physically disturbed. Monitoring was not, however, comprehensive during that time period. NOAA Fisheries anticipates a minimal level of effect of the proposed actions on Snake River spring/summer chinook salmon. Strict adherence to the Reasonable and Prudent Measures and Terms and Conditions below should further reduce the potential for redd abandonment/physical disturbance. Spawning redd abandonment means that any redd (finished or unfinished) is left unattended or abandoned due to floatboat harassment or disturbance or a similar disturbance by outfitted walk/wade anglers. Physical disturbance to a spawning redd means any uncovering of salmon redd gravels or any compression of salmon redd gravels, such as the grounding of floatboats on top of redds or wading anglers stepping on redds.

Despite the use of best scientific and commercial data available, NOAA Fisheries cannot quantify a specific amount of incidental take of individual fish or incubating eggs for these actions. NOAA Fisheries anticipates that the likelihood of take is very low in a year of average salmon returns (numbers of fish and timing) because there are so few redds before August 15, (upper section closure) and August 29, (lower section closure) that keeping track of redds and implementing quiet zones should be fully effective in avoiding or minimizing disturbance of spawning fish. The potential for take does, however, arise from the possibility that surveys will fail to detect some redds that are present, or that some fish are just beginning spawning behavior at the time of the survey (redds not detectable) and may be disturbed subsequently by floatboating or angling activity. The high frequency of the surveys (daily) minimizes but does not entirely eliminate those situations. The extent to which reproductive success may be reduced by occasional disturbances of fish that are in the early stages of spawning is unknown. However, given that these fish will not have used substantial energy reserves in establishing redds, the level of reduction in reproductive success is expected to be limited.

NOAA Fisheries anticipates a somewhat greater (although still low) risk of take in years of increased run size and/or early runs. In those years NOAA Fisheries anticipates that it may be difficult to locate every redd and have guides keep track of all redd locations/quiet zones to fully avoid or minimize all disturbances of spawning fish. Daily monitoring will be especially important in these years to determine if the take described in this Opinion (see statement below) has been exceeded and if reinititiation of consultation is necessary.

Only one incident of take, to the extent of abandonment, related to floatboating or outfitted walk/wade angling effects on spawning fish in known spawning areas (Buckhorn Picnic Area, Torrey's Hole, and Indian Riffles) or on established redds located in surveys is authorized under this Opinion. The SNF is expected to provide sufficient information on redd locations, quiet zone behavior and boat maneuvering through these areas so that disturbance of spawning fish is avoided or minimized. The SNF will avoid, where possible, or minimize disturbance to spawning fish at identified redds, to the extent that the potential disturbance would not be expected to result in the abandonment of redds. Should a redd abandonment occur, which is associated with floatboating or outfitted walk/wade angling activities, this one incident is authorized; however, the SNF will contact NOAA Fisheries to make adjustments so this type of take is not repeated. So long as the SNF conducts the required monitoring and is effective in

establishing and maintaining quiet zones and in communicating with floatboaters, redd abandonment is not expected to occur. Take related to undetected redds and early spawning fish may occur, and is authorized, but is expected to be minimized (as noted above) by: (1) closure dates that tend to minimize the number of redds present when the river is being floated/waded, (2) thorough and accurate redd surveys that minimize the number of redds not detected, (3) frequent surveys that enable detection of newly established redds, and (4) reduced energy investment (re: eventual reproductive success) by fish that are in the early spawning stage, and are disturbed before they have begun excavating redds.

B. Reasonable and Prudent Measures

Reasonable and prudent measures are non-discretionary measures to minimize take, that may or may not already be part of the description of the proposed action. Some of the measures introduced in II. (A) Proposed Actions Modifications and/or Additions are reiterated or augmented below as reasonable and prudent measures or terms and conditions. The reasonable and prudent measures and terms and conditions must be implemented as binding conditions for the exemption of section 7(o)(2) to apply. The SNF has the continuing duty to regulate the activities covered in this incidental take statement. If the SNF fails to require the applicants to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, or fails to retain the oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse, providing no coverage (for incidental take) under ESA.

NOAA Fisheries believes that the following reasonable and prudent measures are necessary and appropriate to minimize take of listed fish resulting from implementation of the actions. The measures re-affirm elements of the modified proposed actions, as NOAA Fisheries found that these elements are particularly crucial for minimizing incidental take. The terms and conditions, given at C below, must be complied with to implement these reasonable and prudent measures..

<u>The SNF shall:</u>

1. Minimize incidental take by monitoring adult chinook salmon movement and redd development.

2. Minimize incidental take by monitoring effectiveness of the information/education efforts in safeguarding redd development and egg deposition.

3. Minimize incidental take by providing each spawning chinook salmon and each identified redd protection to avoid or minimize disturbance by floatboaters and/or outfitted walk/wade angling activities.

4. Minimize incidental take by providing information and education material to floatboaters and outfitted walk/wade anglers.

C. Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the ESA, the SNF must comply with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are non-discretionary.

1. Redd Monitoring

The SNF shall monitor chinook salmon movement and redd development.

a. *Daily Monitoring*

Daily surveys shall begin on or prior to August 5 and continue through August 14, for the upper section of the action area. Monitoring on the lower section shall begin on or prior to August 15 and continue through August 31. Monitoring will be conducted by either qualified SNF staff or a qualified third party reporting directly to responsible SNF personnel. The Salmon River from Buckhorn Bridge Picnic Area to Torrey's Hole shall be surveyed for salmon and redds at least once per day. Each day, all accessible reaches must be surveyed for adult chinook use.

Upper Section

August 5 through August 14 conduct daily monitoring.

Lower Section

August 15 through August 31 conduct daily monitoring.

b. Comprehensive Redd Identification Survey

A yearly over-flight survey of redds on the Salmon River, within the action area, is typically accomplished by IDFG in latter August or early September. In coordination with this yearly overflight survey, the SNF shall conduct a standard river survey to identify redds within the action area. This standard survey shall occur on the same day as the annual overflight. The survey shall be completed to provide a basis on comparison of redd numbers and locations identified from the standard ground survey administered by the SNF. The SNF shall provide

results of this comparison in their monitoring report to NOAA Fisheries (refer to item 2.b., below). The SNF administered survey is only required to extend to the eastern boundary of the SNRA, where Holman Creek enters the mainstem of the Salmon River.

If a yearly IDFG overflight survey to identify redd numbers and locations does not occur, the SNF and NOAA Fisheries will discuss alternatives such as: not needing the comparison monitoring in a given year, having another entity do the overflight, etc.

c. End of Season Monitoring

One final comprehensive monitoring shall occur approximately September 22, to document the end of the spawning season. This will provide an accurate assessment of the total number of redds produced throughout the season. On September 23, the previously closed sections and access points may be re-opened to floating and outfitted walk/wade angling.

d. Data collection

Data collected shall indicate date of redd identification, location of the redd, holding/staging locations of spawners (as identified), and any additional information necessary to continue a trend analysis with information from prior surveys. Updates of the database shall also include: average date first salmon observed, average first spawner, earliest spawner, average spawning (to help determine spawning onset date trends), etc.

2. Effectiveness and Other Monitoring

The SNF shall monitor effectiveness of the information/education efforts in safeguarding redd development and egg deposition.

a. Compliance and Effectiveness Monitoring

The SNF shall monitor compliance of commercial and non-commercial floatboaters and walk/wade angling activities in meeting the relevant terms and conditions listed above.

Prior to the 2004 floatboating season, the SNF will work with NOAA Fisheries to develop the specific effectiveness monitoring protocol that will be followed in 2004 and subsequent years. A component of this protocol shall be tracking effectiveness in relation to the number boats that are on the river and passing through river reaches that have redds.

Compliance/Redd Identification Monitoring

Upper and Lower Section (Outfitted Walk/Wade Angling Only)

Upper Section: August 15 - End of Angling season to be completed by Permittee
Lower Section: August 31 - End of Angling season to be completed by Permittee

The Outfitted Walk/Wade Angling permittees will monitor the section of river to be fished prior to conducting guided angling activities in the immediate area. The SNF will monitor the permittee's activities to ensure outfitter and clients are angling a minimum 150 feet away from any redd.

While redd identification is being deferred to the permittee/outfitter by the SNF from August 15 and August 31 to the end of the angling season, the SNF will ensure compliance of these activities with the conditions of the Incidental Take portion of this Opinion.

b. Reports

The SNF shall submit a report to NOAA Fisheries by January 31, of the following year addressing the monitoring identified in the Terms and Conditions.

3. Protection from Disturbance

The SNF shall provide protection to each chinook salmon and each redd that will avoid or minimize disturbance by floatboaters and outfitted walk/wade angling activities.

a. Upper Section (Floatboating only)

The actual average date of primary spawning onset for spring chinook salmon in the upper section of the action area is difficult to determine due to limitations in the data set (AA BA NSBC-reca 10a). The SNRA has estimated that the primary spawning onset occurs on approximately August 15. The portion of the action area from Buckhorn Picnic Area (MP 184.4) to Salmon River Bridge/Stanley (MP 189.9) will close to commercial floating, and SNF administered access August 15 through September 22. These closure dates will be incorporated as terms and conditions of the SUPs issued to outfitters.

b. Lower Section (Floatboating only)

According to the data set (AA BA NSBC-reca 10a, CAHR-reca 11, PEHO 17), the actual average primary spawning onset for summer chinook salmon occurs on August 30 for the NSBC, CAHR and

PEHO sections of the action area. To provide protection for federally listed species at the onset in spawning activity, the 29 miles of the river within the action area will close (including all access points) on August 29 through September 22. These closure dates will be incorporated as terms and conditions of the SUPs issued to outfitters.

Upper and Lower Section (Outfitted Walk/Wade Angling Only)

Closure dates do not apply (outside of Torrey's Hole and Indian Riffles) to outfitted walk/wade angling. Outfitted walk/wade angling is restricted to staying a minimum of 150 feet from any redd as identified by SNF and/or the Permittee.

Closure to Outfitted walk/wade angling will be implemented at Torrey's Hole on August 15.

Closure to Outfitted walk/wade angling will be implemented at Indian Riffles on August 15.

c. Designated Quiet Zones

The SNF shall implement quiet zones at Indian Riffles and Torrey's Hole beginning August 15 and continuing through August 28, after which these segments of the river are closed to floating (August 29 through September 22).

Quiet zones shall be designated by signs at the beginning and end of each zone. At Indian Riffles the first quiet zone shall begin at approximately MP 204.7 and end at approximately MP 205.6. The second quiet zone at Torrey's Hole shall begin at approximately MP 210.6 and end at approximately MP 211. Signs describing quiet zone behavior and rules shall be placed at all SNF river access points. The signs shall include limited information on salmon spawning activities and redd identification, as well as a list of rules and regulations for floating and angling through the quiet zones. These rules include: applying redd avoidance measures, following river right/river left directions, and using any other SNF identified routes/measures to avoid or minimize disturbance. Quiet zone rules and regulations shall also include, but are not limited to: floatboaters and outfitted anglers remaining out of the water or within the boats throughout the entire designated areas, floatboaters keeping their boats within the thalweg of the channel, and
keeping paddling to an extreme minimum and avoiding excessive noise. Unnecessary paddling or other disturbances shall be avoided. The quiet zone measures will be incorporated as terms and conditions of the SUPs issued to outfitters.

For non-commercial floatboaters, in addition to the sign postings noted above, SNF shall use available information tools to ensure non-commercial floatboaters are aware of the quiet zones

and routes through these areas in order to avoid redds. For example, SNF shall provide this information to non-commercial floatboaters that contact the SNF for river conditions and other information related to floatboating.

d. Individual Quiet Zones

The SNF shall implement quiet zones at any observed redd site (a minimum of 100 feet above and below the redd). These will be implemented from August 5 to 14 (upper section) and August 15 to 31 (lower section). Redds will be identified by qualified personnel on one day and their location(s) reported to the guides by SNF staff prior to or on the following day.
Rules for individual quiet zones and information tools for commercial and non-commercial floatboaters are the same as for designated quiet zones (refer to item C. above). The quiet zone measures will be incorporated as terms and conditions of the SUPs issued to outfitters.

e. Contingency if Avoidance Measures Not Feasible

In the course of identifying redds and quiet zone measures such as routes to avoid disturbing redds, if SNF determines that conditions (e.g., low water, spacing and location of redds, etc.) do not enable routes for boats through these reaches that will avoid or minimize disturbance of occupied redds (and thus minimize likelihood of abandonment), then portage or closure or other means determined through immediate communication between NOAA Fisheries and SNF shall be implemented.

f. Licensed Guides; Use Days

All guided trips must be lead by a licensed guide. In addition, the SNF shall notify NOAA Fisheries with any exceedance of the 11,203 APUD as described in the May 1, 1996, Record of Decision, Salmon River Corridor, FEIS.

g. Boat Numbers

The SNF shall regulate boat numbers, as follows:

Upper Section (MP 184.5 - 189.9)

Unlimited number of boats per day from May 1 to August 14. Sectional closure from August 15 until September 22. Unlimited number of boats per day from September 23 to the end of the floating season.

Lower Section (MP 190 - 213.5)

Unlimited number of boats per day from May 1 to August 14, and 48 boats per day from August 15 through August 28. Sectional closure from August 29 until September 22. Unlimited number of boats per day from September 23 to the end of the floating season.

4. Information and Education

1. The SNF shall provide information and education materials to floatboaters and walk/wade anglers.

2. The SNF shall further minimize the likelihood of effect of any floatboating and outfitted walk/wade angling activities from occurring over or on salmon redds or spawning salmon by educating outfitters and the public on the need for spawning salmon protection and the status of spawning activities in the area. This may be done through the use of signs, flyers, or other means.

3. The SNF shall station a person at each launch ramp or place large placards to educate floatboaters and walk/wade anglers on boating and wading restrictions. At a minimum each floatboating and walk/wade angling guide shall be informed about the status of Snake River chinook salmon in the upper Salmon River, quiet zones, redd locations and appropriate avoidance and protection measures and possible enforcement actions. Outfitters will be encouraged to pass information on to all clients.

VIII. CONSERVATION RECOMMENDATIONS

Section 7 (a)(1) of the ESA directs Federal agencies to utilize their authorities to further the purposes of the ESA by carrying out conservation programs for the benefit of threatened and endangered species. Conservation recommendations are discretionary measures suggested to minimize or avoid adverse effects of a proposed actions on listed species, to minimize or avoid adverse modification of critical habitat or to develop additional information. NOAA Fisheries believes the following conservation recommendations are consistent with these obligations, and therefore should be implemented by the SNF.

1. The SNF should monitor public access points along the action area of the upper Salmon River. This would establish the total use of this river by both commercial and private users. Information could include: what types activities are occurring by how many users and are the APUD numbers within the Salmon River Corridor FEIS, 1996 still valid.

2. The SNF should conduct a limiting factor analysis for listed Snake River salmon and steelhead within the action area. As limiting factors are identified, measures to address these limiting factors should be explored to improve conditions within the action area.

3. The SNF should continue to pursue cooperative agreements with the Salmon-Challis Forest that promote recovery of listed Snake River salmon and steelhead and improve overall aquatic health of the Salmon River drainage.
4. The SNF should educate the general public on the status and recovery needs of Snake River salmon and steelhead and encourage active participation in achieving these goals.

5. The SNF should conduct a thorough study of the effects of floatboating and walk/wade angling activities on listed salmon. This study would allow for better future management of the resources, relative to recreation activities. Furthermore, this would also provide a better understanding of the potential for take on listed salmon caused by these activities.

6. The SNF should continue to take measures to reduce sediment delivery to the Salmon River and its tributaries that may result from road use, construction and/or maintenance.

In order for NOAA Fisheries to be kept informed of actions minimizing or avoiding adverse effects or those that benefit listed species or their habitat, NOAA Fisheries requests notification of the implementation of any conservation recommendations.

IX. REINITIATION OF CONSULTATION

Consultation must be reinitiated if: (1) the amount or extent of taking specified in the Incidental Take Statement is exceeded, or is expected to be exceeded; (2) new information reveals effects of the actions may affect listed species in a way not previously considered; (3) the actions are modified in a way that causes an effect on listed species that was not previously considered; or (4) a new species is listed or critical habitat is designated that may be affected by the actions (50 CFR 402.16).

X. MAGUNSON-STEVENS FISHERY CONSERVATION AND MANAGEMENT ACT

A. Background

Public law 104-267, the Sustainable Fisheries Act of 1996, amended the MSA to establish new requirements for EFH. The regulations require designation of EFH in Federal fishery management plans. The EFH is defined as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity" (MSA section 3). The Pacific Fisheries Management Council (PFMC) has designated EFH for Federally managed Pacific groundfish and coastal pelagic and Pacific salmon fisheries. The EFH for the groundfish and coastal pelagic fisheries are marine designations, while the Pacific salmon EFH includes freshwater, marine, and estuarine environments.

The EFH consultation with NOAA Fisheries is required by Federal agencies undertaking, permitting, or funding activities that may adversely affect EFH, regardless of its location. The consultation requirements of section 305(b) of the MSA (16 U.S.C. 1855[b]) provide that:

1. Federal agencies must consult with NOAA Fisheries on all actions, or proposed actions, authorized, funded, or undertaken by the agency, that may adversely affect EFH.

2. NOAA Fisheries shall provide conservation recommendations for any Federal or state activity that may adversely affect EFH.

Federal agencies shall, within 30 days after receiving conservation recommendations from NOAA Fisheries, provide a detailed response in writing to NOAA Fisheries regarding the conservation recommendations. The response shall include a description of measures proposed by the agency for avoiding, mitigating, or offsetting the impact of the activity on EFH. In the case of a response that is inconsistent with the conservation recommendations of NOAA Fisheries, the Federal agency shall explain its reasons for not following the recommendations.

B. Pacific Coast Salmon and EFH Affected by the Proposed Actions

The Pacific Coast Salmon Fishery Management Plan (FMP) was approved by the Secretary of Commerce on September 27, 2000. Pacific salmon species covered in the FMP are coho salmon (*Oncorhynchus kisutch*), chinook salmon (*O. tshawytscha*), and pink salmon (*O. gorbuscha*). The FMP designates EFH for the Pacific salmon fishery as all those streams, lakes, ponds, wetlands, and other waterbodies currently or historically accessible to salmon in Washington, Oregon, Idaho, and California, except above certain impassable barriers identified by (PFMC), or above longstanding naturally impassable barriers (i.e., natural waterfalls in existence for several hundred years). Activities occurring above impassable barriers that are likely to adversely affect EFH are subject to the consultation provisions of the MSA. Snake River chinook salmon have designated EFH throughout the action area.

C. Summary of Proposed Actions

The proposed actions are described above (see *Proposed Actions*, section II).

D. Effects of the Proposed Actions on EFH

1. General Considerations

As noted above in the Opinion, there is a negligible likelihood that the actions will adversely affect habitat for these species. Similarly NOAA Fisheries does not expect adverse effects on EFH.

This Opinion discusses in section V, Analysis of Effects, the direct, indirect, and cumulative effects of the proposed actions on anadromous fish habitat in the action area. The principal effects of the *proposed actions* on salmon EFH are not likely to jeopardize the continued existence of Snake River spring/summer chinook salmon or result in the destruction or adverse modification of EFH.

2. Estuary and Nearshore EFH

Estuary and nearshore EFH is not affected by the proposed actions because they are several hundred miles inland, and relatively small in scope.

3. Coastal Pelagic EFH

Coastal pelagic EFH is not affected by the proposed actions because the proposed actions are approximately 900 plus miles inland, and relatively small in scope.

4. Salmon EFH

The proposed actions will not adversely affect EFH for Snake River chinook salmon.

E. Conclusion

NOAA Fisheries concludes that the proposed actions will not adversely affect designated EFH for Snake River spring/summer chinook salmon.

F. The EFH Conservation Recommendations

Conservation recommendations are discretionary measures suggested to avoid, minimize, or otherwise offset adverse modification of EFH, or to develop additional information. NOAA Fisheries worked with the SNF, through consultation, to incorporate measures to avoid or minimize adverse effects of the proposed activities. Consequently, the proposed actions include mitigation to avoid effects on EFH, and additional non-discretionary conservation measures are required by this Opinion as reasonable and prudent measures and terms and conditions. No further conservation measures are necessary for EFH.

G. Statutory Requirements

The MSA and Federal implementing regulations (50 CFR Section 600.920) require Federal action agencies to provide NOAA Fisheries a written response to EFH conservation recommendations within 30 days of receipt. Since there are no conservation recommendations for the proposed actions in this consultation, the SNF is not required to provide a written response.

H. Consultation Renewal

The SNF must reinitiate EFH consultation with NOAA Fisheries if the actions are revised in a manner that may adversely affect EFH, or if new information becomes available that affects the basis for NOAA Fisheries' EFH conservation recommendations (50 CFR Section 600.920 [k]).

XI. REFERENCES

Section 7(a)(2) of the ESA requires Biological Opinions (Opinion) to be based on "the best scientific and commercial data available." This section identifies the data used in developing this Opinion.

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ATTACHMENT A

Outfitter Concerns and Comments Based
Upon the January 3, 2003 Version of the Floatboat, Walk/Wade Angling
Draft Biological Opinion

TRIANGLE C RANCH (TCR)

TCR Issue #1:
The data and quote on a female Chinook Salmon carcass retrieved with 950 un-deposited eggs in her cavity is incorrect. It was not associated with floatboating.

Response:
The quote in the Jan. 3, 2003 version of the Biological Opinion (Opinion) was in error, the quote has been corrected to accurately reflect the data available. (Section V, Analysis of Effects)

TCR Issue #2:
The same rules and regulations, including boat numbers, should apply to all river users (commercial and non-commercial) during salmon spawning season.

Response:
The restrictions for river users are handled as similarly as possible within SNF authorities. SNF does have the authority to regulate access via Forest Service land for private floatboaters.

TCR Issue #3:
Outfitters must be able to plan our late season.

Response:
As stated in the Terms and Conditions portion of the Opinion (Effectiveness and Monitoring Section), river closure dates are as follows:
Upper Section: August 15 - September 22
Lower Section: August 29 - September 22

These dates are firm dates, thus giving outfitters dates on which to plan their season.

TCR Issue #4:
Outfitters need to run through Labor Day (would compromise on Sept. 2).

Response:
Based upon the data sets within the All Aquatics Biological Assessment (AABA) the peak spawning surge range for listed chinook salmon occurs on or near August 30, this date is variable based on many environmental factors. Also, the actual date when Labor Day occurs can and does change from calendar year to year. To provide protection for listed species and to provide for commercial activities to occur to the extent possible the above closure dates (TCR Issue #3)
were established. Options to extend the season later with use of portages were discussed with this outfitter; however, a workable alternative was not identified.

TCR Issue #5:
Use portage system from August 28-September 2

Response:
This management option was discussed during the consultation process. After evaluating the possible the use of portages, and their potential effectiveness to the protection of listed fish, and the additional monitoring required, the portage system was not adopted.

TCR Issue #6:
Boat limits should not begin until fish are present in the floated stretch.

Response:
Based upon the redd data within the AABA it was determined that extending the date on which boat numbers and quiet zones are implemented should not significantly effect spawning salmon in the upper section of the action area, and would not change the implementation date of the lower section. With the exception of one outlier, redds have not been developed in the lower section of the river since 1992 until August 16. The date for quiet zones and boat numbers has therefore been revised to August 15 (one day prior to the first redd).

TCR Issue #7:
Suggest 8 rafts and 4 kayaks prior to August 21.

Response:
There is not information to indicate that a non-guided kayak has less potential impact to spawning salmon, than a guided raft. For this reason, and to avoid complications relative to the clarification of water craft, the limit will remain set at 8 boats, including hard shell kayaks, inflatable kayaks and inflatable rafts.

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SAWTOOTH FISHING GUIDES (SFG)
SFG Issue #1:
It is important that outfitted fishing follow more nearly the rules for non-outfitted fishing, just as outfitted floating and non-outfitted floating do.

Response:
The difference between the two user groups arise from the fact that one user group is a permitted commercial activity under the jurisdiction of the State and Federal Governments, where the outfitter is realizing an economic return for services rendered.

Although, this activity is under the jurisdiction of the State and Federal Governments, the other user group is solely recreational with no economic returns realized by any party.

SFG Issue #2:
Rather than quiet zones, it would be better to just require outfitted walk/wade fishing activities must occur 100 feet or more away from any redd. This also allows opportunity for myself and my guides to talk with and educate other fishermen in the area who might be going towards redds to fish.

Response:
NOAA Fisheries has eliminated quiet zones (with the exception of Torrey's and Indian Riffles) for outfitted walk/wade fishing only. A restriction of 150 feet is set for a distance at which outfitters and clients must remain from any redd(s).

SFG Issue #3:
Fishing and floating should be addressed somewhat separately in the Terms and Conditions.

Response:
Distinctions between the two permitted activities are reflected in the Terms and Conditions section of the Opinion.

SFG Issue #4:
The third paragraph on page 17 needs to be dropped or significantly changed. The 1972 and 1976 studies are old and the implications of the female Chinook dying before "spawning out" are wrong. The details of what happened with that fish are much different than what this implies.

Response:
The quote in the Jan. 3, 2003 version of the Biological Opinion (Opinion) was in error, the quote has been corrected to accurately reflect the data available. (Section V, Analysis of Effects)

SFG Issue #5:
On Page 19, midway through the third paragraph …"There will be two designated quiet zones…. in these areas. " This is the perfect system for the walk and wade permit holder for the entire length of the river during the Salmon Restriction time of the year. It could easily be done with the daily monitoring of the Salmon up until, I believe the date was, September 3 then it would be up to the permit holder and the SNF-USFS to work out a plan for any other dates that the permit holder might be fishing in the area.

Response:
This issue is addressed in the Terms and Conditions section of the Opinion, "Effectiveness and other Monitoring".

SFG Issue #6:
On Page 20, where it lists the estimated private floatboaters, perhaps the number of non-outfitted anglers should also be listed?

Response:
The data about amount of non-outfitted anglers fishing within the analysis area is not collected.

SFG Issue #7:
In the list of Cumulative Effects, in addition to timber sales, private land activities, water adjudication and floating, I feel that it is very important to list the cumulative effect of private fishermen during the spawning and pre-emergent fry time of year.

Response:
Procedurally, private fishing activities are handled under section 10 consultation. Since this is an activity which is consulted on separately, it is not evaluated as an additional cumulative effect.

SFG Issue #8:
There are several places that I think it is important to make the distinction between floating and fishing. Notably, page 4, C. Outfitted Walk/wade fishing section and in any areas where linear type closures (whole sections of river) are closed to floating but could be restricted to angling by a "distance of 100 feet from any known redds," instead of lumping it into the floating restrictions.

Response:
Distinctions between the two permitted activities are reflected in the Terms and Conditions section of the Opinion.

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RIVER COMPANY (RC)

RC Issue #1:
The River Company supports the limit of 48 boats per day for commercial floatboat outfitters, with boats distributed as follows: 16 for Sawtooth Adventure Center, 16 for The River Company, 8 for White Otter Outdoor Adventures and 8 for Triangle C.

Response:
The Opinion only states 48 outfitted boats per day, distribution of these boats is not discussed within the Opinion.

RC Issue #2:
The River Company supports the idea that the River Company lunch will no longer be used as a take-out by other outfitters and the public during spawning season.

Response:
Particular launch points and their use is not discussed within the Opinion, all points may be used to meet conditions of the Incidental Take portion of the Opinion.

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WHITE OTTER (WO)

WO Issue #1:
The data and quote on a female Chinook Salmon carcass retrieved with 950 un-deposited eggs in her cavity is incorrect. It was not associated with floatboating.

Response:
The quote in the Jan. 3, 2003 version of the Biological Opinion (Opinion) was in error, the quote has been corrected to accurately reflect the data available. (Section V, Analysis of Effects)

WO Issue #2:
River sections need to be separated differently than in the document. The division should break down Sunbeam Dam and Torrey's as a distinct unit, not as part of CAHR as it now stands.

Response:
The designations of NSBC, CAHR and PEHO are utilized as tools for analysis of effects on fisheries, not as designations for permitted activities.

WO Issue #3:
There should be no limits on the number of boats prior to closing the river. Either both outfitters and private floatboaters should have boat limits or neither should have boat limits.

Response:
The restrictions for river users are handled as similarly as possible within SNF authorities. SNF does have the authority to regulate access via Forest Service land for private floatboaters.

WO Issue #4: Disagree with the assumption (page 24) that floatboating is reasonably certain to harass fish which may result in incidental take.

Response:
Data indicates that human or other activities on or near spawning fish can potentially alter their natural spawning habits. (Part V. Analysis of Effects section of Opinion)

WO Issue #5:
There should be no boat limits prior to closing the river. An option to minimize impacts would be for the kayaks to attach or hold on to a raft while floating through Indian Riffles and Torrey's.

Response:
Boat limits prior to section and river closure are established to provide a level of protection to federally listed salmon during the pre-spawning / staging phase of their life cycle.

WO Issue #6:
If boat limits must exist they should not begin until the 21st of August. The data should reflect the average start of spawning season in the section we float.

Response:
Based upon the data sets within the AABA the peak spawning surge range for listed chinook salmon occurs on or near August 30, this date is variable based on a many environmental factors. Boat limits prior to section and river closure are established to provide a level of protection to federally listed salmon during the pre-spawning / staging phase of their life cycle.

WO Issue #7:
If there is a boat restriction of 48 days, the limits should be based on an outfitter average of 48 per day. With an 8 boat limit per outfitter, it should be an 8 boat average per day during the time of restriction. I.e. If restrictions last for 8 days (8 days x 8 boats =64) In this case the outfitter would be allowed to use 64 boats during this time period however he/she deems necessary.

Response:
The limit of 48 boats set on the lower section, beginning August 15 is to reduce the potential impact of floatboats on spawning salmon. As the number of boats increases, the potential for effects to salmon increases. In using an average boat per day restriction the cumulative effects possible during a one day phase are increased dramatically. Therefore boat limits will remain set at 48 boats per day beginning August 15 on the lower section.

The Opinion only states 48 outfitted boats per day, distribution of these boats is not discussed within the Opinion.

WO Issue #8:
The sections should be divided so that the stretch between Sunbeam Dam and Torrey's is a separate unit and stated in the document that any spawning activity above the dam or below Torrey's access will have no impact or influence on decisions made affecting the floated section.

Response:
Presently the action area is separated into three areas with designations of NSBC, CAHR and PEHO. These areas are utilized as tools for analysis of effects on fisheries, not as designations for permitted activities.

WO Issue #9:
Floating season should be extended until Labor Day with the portage system implemented from the 29th of August through closure.

Response
Based upon the data sets within the All Aquatics Biological Assessment (AABA) the peak spawning surge range for listed chinook salmon occurs on or near August 30, this date is variable based on a many environmental factors. Also, the actual date when Labor Day occurs can and does change from calendar year to year. To provide protection for listed species and to provide for commercial activities to occur to the extent possible the above closure dates (TCR Issue #3)
were established.

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SAWTOOTH ADVENTURE COMPANY (SAC)

SAC Issue #1:
Sawtooth Adventure Company felt the proposed action in the draft was a very fair decision that places the Outfitters, Salmon, Visitors, and the Forest Service all on a even playing field

Response:
We agree.

SAC Issue #2:
How we will define "unavoidable"? (NOAA)

Response:
This issue is addressed in the Terms and Conditions section of the Opinion, “Protection from Disturbance”.